

19970917.qrp v00_n851.qrs.970917

Date: Wed, 17 Sep 1997 19:03:33 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 851

QRP-L Digest 851

Topics covered in this issue include:

- 1) [26872] Re: QRP ARCI Contest Awards
by "Ron Polityka" <wb3aal@talon.net>
- 2) [26873] RE:QRP Rigs:A New Deal
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 3) [26874] Keyer is built, Will package soon.
by Ed Loranger <we6w@qsl.net>
- 4) [26875] Re: Long Wire Question
by K5BDZ@aol.com
- 5) [26876] Re: New NorCal Kit
by Ken Lopez <kjllopez@earthlink.net>
- 6) [26877] QRP Afield - ScQRPions Running Amok
by Joe Gervais <vole@primenet.com>
- 7) [26878] cascade circuits boards sought
by Earl Andrews <earlve3ab@host.igs.net>
- 8) [26879] x
by Wa2eaw@aol.com
- 9) [26880] TiCK keyer info wanted
by Wa2eaw@aol.com
- 10) [26881] For Sale: Unbuilt Heath HW-8 and matching p/s
by RobCap@aol.com
- 11) [26882] West Virginia
by Bill Boose <wboose@postoffice.ptd.net>
- 12) [26883] HB: New Web Site for Homebrewers
by Makoto Minowa <minowa@icepp.s.u-tokyo.ac.jp>
- 13) [26884] HB: New Web Site for Homebrewers
by Niels Jensen Kristjansson <nkristja@cadvision.com>
- 14) [26885] HB: New Web Site for Homebrewers
by Makoto Minowa <minowa@icepp.s.u-tokyo.ac.jp>
- 15) [26886] QRP AFIELD NOVICE 40
by ARDUJENSKI@aol.com
- 16) [26887] Rainbow Tuner Enclosure???
by doug hauff <slmachco@fix.net>
- 17) [26888] KC-2 in an OHR100
by gsurrency@juno.com (Gary L L Surrency)
- 18) [26889] Re:Source for: The Complete DXer
by AE0Q V31RY <v31ry@ix.netcom.com>
- 19) [26890] Re: QRP AFIELD NOVICE 40

- by Chris Cartwright <ccart@dns.vidtel.com>
- 20) [26891] Re: QRP AFIELD NOVICE 40
by Larry Trullinger <kb0emb@swbell.net>
- 21) [26892] New HB URL - SUPER VX0!!!
by Bill Meara <wmeara@erols.com>
- 22) [26893] Spud guns, nuke-you-lur silos & a slingshot
by NilsBull@aol.com
- 23) [26894] [Fwd: Re: Arkansas QRP club 40m net]
by Jim <kj5tf@mctc.com>
- 24) [26895] Constant amplitude circuit
by David Shalita <af389@lafn.org>
- 25) [26896] Crystal osc question
by David Shalita <af389@lafn.org>
- 26) [26897] Re: Spud guns, nuke-you-lur silos & a slingshot
by Randy Foltz <rfoltz@wsunix.wsu.edu>
- 27) [26898] Re: Spud guns, nuke-you-lur silos & a slingshot
by "Marshall Emm" <mgemm@mtechnologies.com>
- 28) [26899] Building a Magnetic Loop for 20-80 meters
by "Juan A. Bertolin" <jbertolino@nexo.es>
- 29) [26900] Re: Spud guns, nuke-you-lur silos & a slingshot
by Bob Hightower <ki7mn@dancris.com>
- 30) [26901] Re: Spud guns, nuke-you-lur silos & a slingshot
by "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
- 31) [26902]
by Dan Tayloe-P26412 <Dan_Tayloe-P26412@email.mot.com>
- 32) [26903] FAR circuits web page please
by David Feldman <dgf@netcom.com>
- 33) [26904] FW: Building a Magnetic Loop for 20-80 meters
by "Larry Cruise" <Larry.Cruise@MCI.Com>
- 34) [26905] Keyboard Keyers
by Henry Freedenberg <henryf@quartz.gly.fsu.edu>
- 35) [26906] Inductors
by Elliott Lawrence <edl@pacbell.net>
- 36) [26907] Re: Spud guns, nuke-you-lur silos & a slingshot
by "Marshall Emm" <mgemm@mtechnologies.com>
- 37) [26908] Last call for silver contact material
by Jim W7LS <w7ls@brigadoon.com>
- 38) [26909] Clocks.... Again
by Chris Cartwright <ccart@dns.vidtel.com>
- 39) [26910] Re: Last call for silver contact material
by Chris Cartwright <ccart@dns.vidtel.com>
- 40) [26911] New NorCal Kit
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
- 41) [26912] Spud guns
by "Mark E. Monninger" <markem@primenet.com>
- 42) [26913] Re: New Norcal Kit
by Jeff Grudin <grudin@pacific.vdbs.com>
- 43) [26914] Rainbow Tuner Enclosure

by doug hauff <slmachco@fix.net>
44) [26915] Re: Constant amplitude circuit
by torell@sicom.com (Kent Torell)
45) [26916] Re: New NorCal Kit
by "Michael A. Gipe" <mgipe@reliablemeters.com>
46) [26917] Re: Spud guns, nuke-you-lur silos & a slingshot
by AE0Q V31RY <v31ry@ix.netcom.com>
47) [26918] Re: New NorCal Kit
by John Evans - N0HJ <jae@codenet.net>
48) [26919] Re: Spud guns, nuke-you-lur silos & a slingshot
by "Marshall Emm" <mgemm@mtechnologies.com>
49) [26920] Re: Spud guns, nuke-you-lur silos & a slingshot
by "KA5T Larry Wise" <lewise@inetport.com>
50) [26921] Super CMOS info
by Vic Rosenthal <rakefet@rakefet.com>
51) [26922] 6 meter CW or SSB/CW QRP Plans wanted
by "Basil (Darin) Arrick" <basila@OnRamp.NET>

Date: Tue, 16 Sep 1997 19:01:26 -0400
From: "Ron Polityka" <wb3aal@talon.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [26872] Re: QRP ARCI Contest Awards
Message-ID: <199709162310.TAA09944@pelican.talon.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

I would also like to thank all the QRPers that I contacted
in the 1997 Hootowl Sprint. To my surprise I won 1st place
in PA.

Thanks for the great looking awards Cam!

73 & Good DXing
Ron de WB3AAL

E-mail: wb3aal@talon.net
BBS: WB3AAL@WB3FYL.#BER.PA.USA.NA

OWL's Radio Club

QRP # 5318	PA QSO Party 1996 Small Club Gavel
G-QRP # 3031	PA QSO Party 1996 Active Member, High
10-10 # 13173	Average Aggregate Award
QRP-L # 1099	

Date: Tue, 16 Sep 1997 17:58:04 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "W.D. (Doc) Lindsey/K0EVZ" <70511.3041@compuserve.com>
Subject: [26873] RE:QRP Rigs:A New Deal
Message-ID: <199709161924_MC2-20B0-B37B@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Gang:

Well...all my listed QRP rigs have been spoken for. Soon they will be winging their way to new, happy homes. Thanks one and all who read my postings here and QRP-L. Your interest and questions were most encouraging.

Will be looking for you on the air...maybe this weekend!

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 mn-qrp 19 nj-qrp 69 ak/qrp 139
AR QRP 73 ARCI 9398 ARRL WAS 48/38 DXCC 55/40 <><

OMNI V Sierra Argosy 525 Argo 515 Explorer II-40 Norcal 40a
SW-40 A&A Gary Breed 30 49er 38S Mercury Paddles MFJ 259
MFJ 941D TNT/2 Windom SLV/W6MMA G5RV Auttek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

Date: Tue, 16 Sep 1997 16:30:03 -0700
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [26874] Keyer is built, Will package soon.
Message-ID: <341F167B.35C9@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good afternoon, fine QRP-l folk!

Well, I selected a 555 based circuit for my portable

electronic keyer. I installed a relay so I can work any rig with positive or negative or ?? keying.

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Short article list of 555 based keyers: (No preference order)

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- 1) T-KIT MODEL No. 1553 [Ten-Tec kit]
- 2) 'The QRP TLC-Keyer'; Ham Radio, 1990 article.
By Rick Littlefield, K1BQT.
- 3) Lo-Key #42, June 1994 [Cw Operators' QRP Club Magazine)
Contributed by Len McGowan VK4CWM -- Based on 'Solid Stated Design for the Radio Amateur'; Wes Hayward and Doug DeMaw pages 177 & 178, 1977 Edition.

I selected the 'QRP TLC-Keyer'. This "Ham Radio" magazine article had/has a schematic typo. The paddle common is shown connected to a second pin #1 on the space generating 555 IC. Should be labeled pin #3. Also I added .1 uF disc caps to ground at pin #2 of each of the Dash/Dot generating ICs. This after it worked FB on protoboard, but required hand capacitance to ground when soldered on the perfboard. (Note:the Ten-Tek model shows .01 cap there. Wish I had discovered that earlier! But at least I was on the right track.)

So, update your 1990 Ham Radio articles with the pin #3 connection to the paddle; And .01 uF caps to ground at pin 2 of U2/U3 -- the dot/dash generating IC's.

These 3 designs are very similar.
The T-Kit uses 556 (Double 555's) and has sidetone output.

The TLC Keyer uses three 555's and 5 Vdc Reed Relay.

The Low-key article is the TLC with negative keying and potentiometer voltage divider speed control instead of Rheostat which the other's used. (I tried that but it won't work for "Relay" operation very well. Too little drive current available off the tap. Better to connect the relay direct to the + Voltage through a low value resistor with parallel back-biased diode. Again, add .01 uF at pin #2 of Dot/Dash IC's.

=====

Results:

=====

Using a 9 Volt NiCd battery and a 40 ma Relay it works FB, for about 40 minutes of continuous Dashes. Then 'my' current hungry relay can't be switched. Note: I used a 100 Ohm resistance with the relay instead of the 470 Ohm so it would work.

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Power Considerations:

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When I get the low current Reed relay, the 470 Ohm resistor will be installed and I expect many days of operation on one lil' ol' 9 Volt battery.

Possibly change to CMOS 555 ic's running uAmps not mAmps. These are direct substitutes.

Possibly add switchable output so I only use the relay when absolutely necessary. Transistor keying at other times.

Find a cheap solid-state relay.

Neither a borrower or lender be..... Now I can return the keyer I borrowed! But the bencher stays until I homebrew the paddle.

=====

Additional List of articles that helped me:
Krista Iambic Keyer, "Sprat", 12/1992

Mini-mos keyer:
<http://cnswww.cns.cwru.edu/misc/w8edu/projects/cmos-keyer/cmoskeyr.html>

CW-Keyer p.80 & 81; 73 Magazine July, 1988

The Micro-T0 MKII Keyer, QST Sept. 1975

1974 Amateur radio handbook.

misc circuit reference books.

=====

So, all my work on the table for someone else to try out.

Hope this qrp-1 contribution finds further use by y'all.

Very 73 to all.

-Ed Loranger

--

72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/ARCI#9397/Norcal#2227/ARS#275/AR#112 grid CM88ok
mailto:we6w@qsl.net <http://www.qsl.net/we6w>

Date: Tue, 16 Sep 1997 19:41:54 -0400 (EDT)
From: K5BDZ@aol.com
To: K5xu@cris.com, qrp-l@Lehigh.EDU
Subject: [26875] Re: Long Wire Question
Message-ID: <970916193944_1628794210@emout03.mail.aol.com>

Mike

Hoddy Toddy (oops...you might have gone to State)

Suggestion on your long wire antenna....can you make it an off-center fed antenna, and feed it with 300 or 450 ohm twinlead and thru a good tuner?

Will go a long way toward keeping stray RF down unless you have a GREAT ground. End fed longwires are a favorite of mine, but you really need a good ground, (counterpoise minimum) and PVC water pipes are only good if you snake a wire down the pipe thru the water...HI

While you should practice having a good ground on any installation, using twin lead of some kind should keep your stray RF to a minimum with a good tuner.

Short on theory, long on experience. your question is good for at least a week of conversation between theory laden folk.

Good Luck

Bill, K5BDZ

Date: Tue, 16 Sep 1997 16:37:09 -0700
From: Ken Lopez <kjlopez@earthlink.net>
To: mgipe@reliablemeters.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [26876] Re: New NorCal Kit
Message-ID: <341F1826.41CF@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

OK you guys, stop paddling around the issue here. What the heck is this thing? Perspiring minds want to know...

N6TZV

Date: Tue, 16 Sep 1997 16:40:56 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [26877] QRP Afield - ScQRPions Running Amok
Message-ID: <199709162340.QAA13972@usr04.primenet.com>

Howdy Folks,

The AZ ScQRPions are scattering to the winds for QRP Afield. We'll have many of the western states covered, so pay close attention to that state when you work one of us. Shoot, we may even have a few operating from AZ. ;-)

This is, of course, part of a master-planned conspiracy to quietly infiltrate our neighboring states and gather valuable info for Fox season. Remotely-activated RF absorption units will be put into place. Remain calm. All is well. Pay no attention to the men in dark suits.

(Coded AZNM message: The Gummi Bears are fierce, but the pizza is clear of anchovies.)

Hope to hear ya Saturday!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It was the monkeys! The monkeys did it!"

Date: Tue, 16 Sep 1997 20:12:20 -0400 (EDT)
From: Earl Andrews <earlve3ab@host.igs.net>
To: qrp-1@Lehigh.EDU
Subject: [26878] cascade circuits boards sought
Message-ID: <199709170012.UAA06669@host.ott.igs.net>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Hello out there fellow qrp gurus and followers. Im going to build something this winter. I have the plans for the (now out of production) Norcal Cascade, 75 and 20 meter ssb xsciever (kit). Most of the parts I have in my junkbox including parts for a rig with a 9 mhz if and a 5-5.5 mhz vfo. I would like to try and buy a set of circuit boards for this project. It looks a little difficult to build with ugly construction and point to point wiring, although it could be done! Any help.

I'd be glad to reimburse you the cost of the boards..i say boards because it has a main cct brd plus plug in boards for each band. I talked to a fellow on 75 meters using one and he had a good signal and it sounded fb as well. We could have ragchewed armchair copy as a matter of fact.

Im moving soon and should have much more time for hf qrp operating. I plan to check into a few nets on cw during the week. Any W.A.S. nets for qrp out there? What about the activity on the colorburst freq at the low end of 80. How about the low end of 160 on cw? Is there any activity there? This infor would help me formulate a plan for an antenna when i move in Oct. Right now I cant operate during the week because of an apt qth and the weekends are usually vy busy. Hope to get on hf qrp soon .

73 earl

Date: Tue, 16 Sep 1997 20:24:34 -0400 (EDT)
From: Wa2eaw@aol.com
To: qrp-1@Lehigh.EDU
Subject: [26879] x
Message-ID: <970916202137_-2101665919@emout14.mail.aol.com>

post to list.

Any feed back on Tick1 or 2 keyers appreciated
tnx in advance;
Bob WA2EAW

Date: Tue, 16 Sep 1997 21:06:07 -0400 (EDT)
From: Wa2eaw@aol.com
To: qrp-1@Lehigh.EDU
Subject: [26880] TiCK keyer info wanted
Message-ID: <970916210345_1796641045@emout16.mail.aol.com>

To all;
I am thinking of getting a TiCK keyer. Would appreciate any information about the kits etc.
Tnx 72 de Bob.. WA2EAW

Date: Tue, 16 Sep 1997 21:32:50 -0400 (EDT)
From: RobCap@aol.com
To: qrp-1@Lehigh.EDU, HEATH@listserv.tempe.gov
Subject: [26881] For Sale: Unbuilt Heath HW-8 and matching p/s
Message-ID: <970916212839_976907137@emout02.mail.aol.com>

For Sale: I have a collection of unbuilt Heathkits, and am thinning out some of my duplicate kits. I am offering my Heathkit HW-8 in unbuilt kit form, along with the matching HWA-7-1 power supply, also in original kit form.

The HW-8 kit is very clean, and appears to be "undisturbed" (i.e. the way Heath packed it). However, oddly, the manual has a coffee stain on it, and the step by step instructions have been checked off. My hypothesis is that the owner of the kit lent the manual to a friend who used it to build an HW-8, and then subsequently returned it.

The HWA-7-1 is also clean and undisturbed, but the box is a bit worn and beat up.

The combination of the kits together is somewhat rare.

I have had numerous inquiries over the years from guys who wanted to purchase this unbuilt HW-8, and I've decided that the fairest thing to do is to let the pair go to the highest bidder. So I will take offers over the next 1 to 2 days, and let the kits go to the highest bidder.

Terms: I will not accept any bids under \$400 for the pair. The price will include UPS ground shipping, insured, to the lower 48 states. I will also place the two pieces in a protective outer box, so that they are protected in shipment. I will ship upon receipt of buyer's check.

Please feel free to write to me with questions.

73,

Rob, W3DX

Date: Tue, 16 Sep 1997 22:55:56 -0400
From: Bill Boose <wboose@postoffice.ptd.net>
To: qrp-l@Lehigh.EDU
Subject: [26882] West Virginia
Message-ID: <3.0.1.32.19970916225556.006a71fc@postoffice.ptd.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

If anyone needs a contact in WVA for WAS or whatever, I'll be camping there from Sat., 9/20 to Thur. 9/25.
Look for me on 15, 20, or 40, near the QRP calling Freq., or 20 SSB about 14.260 to 270. Early Am and late PM EDST for sure, and maybe during the day if I can get away.

Also, does anyone live in the Lewisburg area or know anyone who does? I'll be giving a seminar to a camping club while there, and could use some local help with show and tell, and local contacts. Mobile, qrp, qro, portable, packet, ..it doesn't matter. I'd like to introduce them to it all, if possible.
Let me know by Thurs, via e-mail., or call me on the local repeater, or try to find me on 146.52 simplex. Thanks.
Bill Boose, N3WST

Date: Wed, 17 Sep 1997 12:59:06 +0900 (JST)
From: Makoto Minowa <minowa@icepp.s.u-tokyo.ac.jp>
To: QRP-L@Lehigh.EDU
Cc: minowa@icepp.s.u-tokyo.ac.jp
Subject: [26883] HB: New Web Site for Homebrewers
Message-ID: <199709170359.MAA11269@yanagi.icepp.s.u-tokyo.ac.jp>

Dear Homebrewers,

Please try to visit 7N3WVM's Home Page for Homebrewers.

Contents include:

Hints for Super VX0, X'tals and Easy Construction,
Pictures of my Homebrew XCVR's (with some diagrams) and Accessories,
and more to come...

7N3WVM

MINOWA, Makoto

QRP-L member #572.

A bigot with no Yaesu, no Kenwood and no ICOM in his shack.

Date: Tue, 16 Sep 1997 22:11:03 -0600
From: Niels Jensen Kristjansson <nkristja@cadvision.com>
To: qrp-l@Lehigh.EDU
Subject: [26884] HB: New Web Site for Homebrewers
Message-ID: <1.5.4.16.19970916220028.10a7eb94@cadvision.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

>Dear Homebrewers,
>
>Please try to visit 7N3WVM's Home Page for Homebrewers.
>
>Contents include:
>
>Hints for Super VX0, X'tals and Easy Construction,
>Pictures of my Homebrew XCVR's (with some diagrams) and Accessories,
>and more to come...
>
>7N3WVM =20
>MINOWA, Makoto
>QRP-L member #572.
>A bigot with no Yaesu, no Kenwood and no ICOM in his shack.

And the URL is??????

73 de N=EDels
VE6NJK/TF3NJ

Date: Wed, 17 Sep 1997 13:08:08 +0900 (JST)
From: Makoto Minowa <minowa@icepp.s.u-tokyo.ac.jp>
To: QRP-L@Lehigh.EDU
Cc: minowa@icepp.s.u-tokyo.ac.jp
Subject: [26885] HB: New Web Site for Homebrewers
Message-ID: <199709170408.NAA11272@yanagi.icepp.s.u-tokyo.ac.jp>

Sorry, forgot to put the URL in the previous posting.

Dear Homebrewers,

Please try to visit 7N3WVM's Home Page for Homebrewers.

<http://www.qsl.net/7n3wvm/>

Contents include:

Hints for Super VXO, X'tals and Easy Construction,
Pictures of my Homebrew XCVR's (with some diagrams) and Accessories,
and more to come...

7N3WVM

MINOWA, Makoto

QRP-L member #572.

A bigot with no Yaesu, no Kenwood and no ICOM in his shack.

Date: Wed, 17 Sep 1997 00:43:10 -0400 (EDT)
From: ARDUJENSKI@aol.com
To: qrp-l@Lehigh.EDU
Subject: [26886] QRP AFIELD NOVICE 40
Message-ID: <970917003942_-2033202419@emout19.mail.aol.com>

It should not be that busy in the NOVICE 40 where I live so if you are looking for an easy WA QRP contact I will be there the full time. I normally am at 7.118 or 7.128 or 7.145. I have an accent so will be easy to pick out (HI HI).

After 4 intensive months I still have not heard a real "1" on the band (the ones I got were in CA, go figure) I am beginning to think they don't exist...prove me wrong!

The rig is tuned up, got a full pint (5 watts) and I applied antenna wax so

come and get me!

Alan KB7MBI

Date: Tue, 16 Sep 1997 21:45:10 -0700 (PDT)
From: doug hauff <slmachco@fix.net>
To: qrp-l@Lehigh.EDU
Subject: [26887] Rainbow Tuner Enclosure???
Message-ID: <199709170445.VAA24935@fletch.fix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

OK gang, heres the deal: I've gotten requests from several directions for a Custom Enclosure for the Rainbow Tuner...I intend to make one for my own Rainbow, but I do not know if I can make it a production item to offer for sale; although it sometimes may seem like it, my shop is not intended to a non-profit business, I depend on it for my livelyhood, and its been quite a struggle at times. At this time I am very busy, it looks like I'll survive another year.

I can spend an evening with my CNC knee mill and carve out an enclosure for my Rainbow, but to produce a quantity I would need to reformat the programming for my CNC Machining Center. The planning, programming, material cost, setup, machining, handling, inspection, anodizing, and packaging require a reasonable quantity to cover costs. I am not in a position to be able to subsidize too much hobby-type stuff...truth be known, I would love to able to offer a Rainbow Enclosure...I like to promote Amateur Radio, and I am tickled when I see one of my products in use...and people have been most generous in their praise of my work.

I took a chance with the 38S Enclosure in part because I had a fair indication that I could peddle at least the 40 or so I could get out of one bar of material. When I took a prototype to a Norcal meeting, 20 guys signed up to buy one, several insisted on giving me money up front. As it turned out, I have sold two runs of 38S boxes, and am doing a third, larger run as a result of the latest CQ magazine 38S article...Dave Ingram was very kind to me!

So back to the deal: If I get enough responses to this query, I will produce a run of Rainbow Tuner Enclosures. Enclosure Requirements:

I am replacing the torroid tap jumper with three SPDT sub-mini switches - I got 'em 10/\$12.50 from All Electronics, they are about 3 bucks apiece at the Rat Shack, I think

I am using a DPDT sub-mini switch instead of jumper for bridge in-out also abt 3 bucks at Rat Shack

I have replaced the trim cap with a Mouser panel-mount variable cap, \$1.52 (works great)

The cost will be almost as much as the 38S Enclosure - probably abt \$20 + shipping

The enclosure and mods will increase the utility of the Rainbow considerably, but there is a price...it will cost a guy(or gal) about \$40 or more to utilize my enclosure when all is figured in.

So how about it? If you are honestly interested in bagging a Rainbow Tuner Custom Enclosure, please send me a note, I'll add 'em up and see what happens...Thanks for the bandwidth!

BTW: The anodized color will poke your eyes out!

73 Doug KE6RIE -Trash your TV, build a kit & operate!-

Date: Tue, 16 Sep 1997 22:27:27 -0700
From: gsurrency@juno.com (Gary L L Surrency)
To: qrp-1@Lehigh.EDU
Subject: [26888] KC-2 in an OHR100
Message-ID: <19970916.222727.6566.1.gsurrency@juno.com>

Gang,

I have successfully installed a Wilderness Radio KC-2 in my OHR100 20m transceiver. The only remaining task to add is the RF detector for the KC-2's wattmeter function, but I have ironed out all the connections and circuit changes on the KC-2 for the digital frequency display and S-meter. After I successfully cut out the front panel of the OHR100 to accomodate the LCD display and pushbuttons, the connections to the transceiver's PCB were relatively painless. ;-)

It was easy to make short connections for the signal tap points, after relocating the RIT toggle switch so the display would fit. It is tight, but the KC-2's pushbuttons *will* fit between the IF bandwidth control and the tuning knob. I had to change one resistor on the KC-2 (as

suggested in the KC-2's manual) to eliminate a small amount of digital modulation from the KC-2 into the OHR's VFO.

Perhaps tomorrow I will get the RF detector built and installed so I can check out the wattmeter function.

Special thanks is in order to Robert Capon, W3DX, for writing the article in the March 1997 issue of 73 Magazine that inspired me to attempt this project. Rob had examples of the KC-2 installed in a Sierra and a OHR100. I worked out the details for my own OHR100 based on his article.

Additional appreciation is due Wilderness Radio and Wayne Burdick, for producing such a novel design and fun accessory!

I have not noticed any problems with the final installation, such as birdies or receiver "warble", except for the VFO transmitter modulation - which I solved easily.

If enough interest is expressed in installation of the KC-2 in this kit, I will make it available to those that are interested.

Now I have master the keyer programming and use of all the features of the KC-2!

Has anybody else tried this? It's not very hard other than the front panel machining. It really makes the OHR100 a better looking and performing rig. The price of the KC-2 is really a bargain when you factor in all of the things it can do, and the lack of requirement for any more add-ons.

PS. Kids, don't try this at home until you're well checked out on using a nibbling tool and file! <:-o

72,

AB7MY

Gary Surrency

Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions, ARRL VE

Date: Wed, 17 Sep 1997 02:19:31 -0600
From: AE0Q V31RY <v31ry@ix.netcom.com>
To: qrp-l@Lehigh.EDU
Subject: [26889] Re:Source for: The Complete DXer
Message-ID: <2.2.16.19970917081931.3fcf96ce@popd.ix.netcom.com>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

KG0ZT wrote:

>

>I've seen a number of references to and praises for a book titled "The
>Complete DXer" here on the QRP listserv. Can someone point me to a source
>for obtaining a copy of this book.

>

The Complete DXer by Bob Locher W9KNI is available from the ARRL.. Listed on page 8 of their Publications catalog (catalog is free if you ask them for a copy via e-mail or their web site).. The book is catalog #2083, \$12.

A sharp-eyed friend WA50ES spotted a picture of me in the middle of page 9 of the catalog, operating CW on Field Day! They never used the photo in QST, but it's been on the cover of 'The New Ham Companion' for a couple of years now.. Guess I was having too much fun!

73 -- Glenn

"Remember, any tool can be the right tool!" Red Green

AE0Q / V31RY ex: GM5BKC, ZB2WZ, SV0WY, WA0VPK
v31ry@ix.netcom.com --SOWP 5558-M, ARRL LM, QCWA LM, NCVA--
<http://www.qsl.net/ae0q>

Date: Wed, 17 Sep 1997 06:53:18 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [26890] Re: QRP AFIELD NOVICE 40
Message-ID: <Pine.LNX.3.93.970917064805.439A-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 17 Sep 1997 ARDUJENSKI@aol.com wrote:

> After 4 intensive months I still have not heard a real "1" on the band (the

Will a real "3" do? The furthest west I've gotten is AZ, but then again I only have a handful of watts and the "electron launcher" on the roof of the townhouse needs some improvement:) See you "up there".

p.s. Thanks for all the new uses for PVC!

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV QRP WAS 17/9 (w/c) | ccart@erols.com --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

Date: Wed, 17 Sep 97 06:10:38 -0500
From: Larry Trullinger <kb0emb@swbell.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [26891] Re: QRP AFIELD NOVICE 40
Message-ID: <199709171109.GAA13818@SWBELL.net>

-- [From: Larry Trullinger * EMC.Ver #2.5.02] --

My QRP TenTec won't tune above 7.11 (limited VFO range, gotta keep the 7.04).

How about a freq lower in the N/T portion of 40m, say about 7.108 or 7.104?

Saturday here in the Kansas City area Wx predicted to be cool !!! Just have to deal with those pesky thunderstorms <:-(

CQ /QRP
72/73 Larry

Date: Wed, 17 Sep 1997 07:11:09 -0400
From: Bill Meara <wmeara@erols.com>
To: minowa@icepp.s.u-tokyo.ac.jp
Cc: qrp-l@Lehigh.EDU
Subject: [26892] New HB URL - SUPER VX0!!!
Message-ID: <199709111113.HAA25778@smtp1.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 01:08 PM 9/17/97 +0900, you wrote:
>Sorry, forgot to put the URL in the previous posting.
>
>Dear Homebrewers,
>
>Please try to visit 7N3WVM's Home Page for Homebrewers.
>

><http://www.qsl.net/7n3wvm/>

>

MINOWA: Thanks for alerting us to your very FB site. I was particularly interested in the Super VXO invented by JA0AS and JH1FEZ.

QRP liteature over here warns that efforts to get additional frequency deviation in VXO circuits often results in the VXO turning into a VFO - with all the instability problems associated with those circuits. I hope you and your colleagues have gotten around this difficulty with your "two crystals in parallel" circuit. It would certainly be a great step forward for those of us who are "rock bound".

Thanks again for the very interesting Web Page with many interesting links!

>

73 de N2CQR

Bill Meara, Falls Church, Virginia

wmeara@erols.com

<http://www.mindspring.com/~johnmb/billm.htm>

Date: Wed, 17 Sep 1997 09:50:47 -0400 (EDT)

From: NilsBull@aol.com

To: QRP-L@Lehigh.EDU

Subject: [26893] Spud guns, nuke-you-lur silos & a slingshot

Message-ID: <970917094859_842901839@emout12.mail.aol.com>

Gang,

All this spud gunning got me going. I went to the local Wal-Mart and chonked down \$6 for a slingshot. And some extra for the largest fishin' sinkers I could find on a hook. I went home, got my really tiny small nylon cord out, laid a big pile of it on the ground in front of me (that took a while to learn . . . the "in front of " me part) and let fly.

First time over the garage roof. Next time, into the tree about garage-roof-high. Next, into the tree but unable to retrieve the string back. Added next weight in the bag. Got over the roof again. Mosquitos by that time were deeply interested in the CO2 prominence that they'd discovered in my back yard. I quit, went inside.

Next evening, another adventure. Took the reel off my extra Cub Scout camp fishin' pole, figured out how to use it and tried fishing line. Over the roof. Snagged in the tree. One sinker left. More mosquitos. Went inside. Wasps in the bedroom.

(Is it me, or are the bees and wasps more viscous this year? I've been chased down by what I guess are yellor-jackets and hounded by wasps. They've come into the house, built nests in used door ways and in general have made mowing the lawn and experience in bug spraying.)

Next time I try new tactic. Over the roof, into the tree, weight, string and all. Yeah, I said "string and all." I didn't have the bitter end tied down to any thing. Thus, it and the weight both sailed nicely over the roof and into the tree and -- to my perception -- went out the other side of the tree. Black hole musta swollered hit up, 'cause I couldn't fine hit anywharz.

Am I like doing something wrong here? Should I have bought the pistol-grip cross-bow thingy with the magic, curare-tipped darts? Should I hire some Yanumani natives from Brazil (I've got those kinds of connections, see) to blow-dart the damn string into the tree. Or, should I just get an extendo-ladder and climb up on the roof of the garage and use the slingshot to hit the first limb I'm close to so that the sinker will bounce back into my forehead?

I see that Cindy bought another 5 lb bag of potatoes. With an "e" on the end. In the plural.

Or would it be easier to just plonk down some money on a multi-band vertical what I can park on the garage roof, radials strung out all over hell and all, and give up? So far the wasps in the garage haven't found the print shop. And I might have some more room in there if someone takes the Intertype caster off the concrete. Free.

73

Nils

WB8IJN &c

. . . had a bunch of fun Saturday runnin' the TAC1-40 on a 44-ft piece of wire what I'd bought off Roger earlier in the day. One contact with -- you had to be there -- a guy in Virginia Beach, the place where the traveling radio deal proved to be absolutely useless. But that's another story. Nice radio. Way too much audio gain, though. And I actually got a QRZ out of an XE1 who eventually had a QSO with a YS# station. Can't imagine what'd be like on a "real" antenna.

Oh yeah, Arnie Coro was on 15m, C02KK, chief engineer of Radio Habana, the guy who does the DX SWL & ham program. Never got a chance to catch him, what with wasps in the bedroom, mediocre antoona, QRN & supper on the table downstairs and all. Que lastima, che.

Date: Wed, 17 Sep 1997 10:20:06 -0500

From: Jim <kj5tf@mctc.com>

To: qrp-1@Lehigh.EDU
Subject: [26894] [Fwd: Re: Arkansas QRP club 40m net]
Message-ID: <341FF526.2C1F@mctc.com>
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary="-----3E15781E55A0"

This is a multi-part message in MIME format.

-----3E15781E55A0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Condx were fairly good last night, but we think one hour later will be better. So starting next week our 40M net will meet at 7:30PM - 00:30Z tuesday evening central time. Look for us on 7.042-43mHz.

I tried to check in myself but nobody heard me! I was parked in a cemetery with my QRP + and a Hamstick - Maybe the RF went into a strange black hole? :)

As always look for the 75M net monday evening 7:30PM, 00:30Z on 3.560Mhz

Everyone is invited to join the Arkansas QRP club, membership is free as is the email newsletter. CU on the air, de Jim AR QRP #2

-----3E15781E55A0
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Return-Path: ac5am@juno.com
Received: from m8.boston.juno.com (m8.boston.juno.com [205.231.101.196]) by mail.cei.net (8.8.5/8.6.9) with ESMTP id JAA30188 for <kj5tf@mctc.com>; Wed, 17 Sep 1997 09:28:10 -0500 (CDT)
Received: (from ac5am@juno.com)
by m8.boston.juno.com (queuemail) id KXZ08936; Wed, 17 Sep 1997 10:26:07 EDT
To: kj5tf@mctc.com
Date: Wed, 17 Sep 1997 09:20:53 -0500
Subject: Re: 40m net
Message-ID: <19970917.092108.3646.2.ac5am@juno.com>
References: <341D7238.8F2@mctc.com> <19970916.075818.3606.0.ac5am@juno.com>
<341E9D74.592D@mctc.com>
X-Mailer: Juno 1.38
X-Juno-Line-Breaks: 0-14
From: ac5am@juno.com (Robert L Stolzle)

Hi Jim,

We had 5 to check into the net last night. Dave, NR3E/5, was one of them. Also W5QJM, Fred in San Antonio. I don't know if he is a member or not. Bob, W4ED; Ken, K5ID and Gino, AL7GQ/0.

I think the later time will be better. Ken, N5RVK, sent me an e-mail and he wanted to check in but got home too late. Also the band will be better for longer skip at the later time.

Hope to hear you on 40M soon. I will be on tonight around 7042 about 6pm with my newest toy a 1W homebrew xmtr and a homebrew rcvr with no filters, no AGC, no frills.

CUL, Bob AC5AM

-----3E15781E55A0--

Date: Wed, 17 Sep 1997 07:03:16 -0700
From: David Shalita <af389@lafn.org>
To: Ham-Homebrew@ucsd.edu, qrp-1@Lehigh.EDU
Subject: [26895] Constant amplitude circuit
Message-ID: <341FE324.3110@lafn.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi,

I am thinking of building a sweep generator for HAM Shack test gear using a DDS Analog Devices AD9850 (1-50mhz) or MAXIM 038 (1-20mhz).

I believe the AD9850 output amplitude is not constant with frequency and drops fast as the frequency out approaches 1/2 clock frequency (125 mhz).

What circuits are available to make the sweeper output amplitude constant voltage when loaded with a 50 ohm or constant impedance load from 1 - 50 mhz as a start?

Has anyone used the MAXIM 038 IC as a signal generator in the sweep mode? Is it's output voltage constant amplitude? While the 038 has smaller frequency range than the 9850, it also does not need a dedicated controller to program.

Thanks for any help and pointers.

73, W6MIK

--

Dave Shalita,
af389@lafn.org
Van Nuys, CA

Date: Wed, 17 Sep 1997 07:31:03 -0700
From: David Shalita <af389@lafn.org>
To: Ham-Homebrew@ucsd.edu, qrp-1@Lehigh.EDU
Subject: [26896] Crystal osc question
Message-ID: <341FE9A7.6C4F@lafn.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am repairing my HAM Shack's DSI Frequency Counter that uses an MM5639 Color Burst to 60 HZ IC for the timebase. The crystal is held at a hot constant temperature by means of a pair of resistors and a Temperature Controller IC.

The Color Burst crystal is not oscillating.

The crystal circuit is:

One side of crystal has a 22 pf COG and a (est 3-10 pf) parallel trimmer cap to ground. The other side has another 22 pf COG to ground. A 5.6 meg resistor shunts crystal terminals.

Only way I could make circuit osc at correct Color Burst Frequency was to remove the 22 pf cap in parallel with trimmer. Now timebase is on correct freq but has small cap (only trimmer) on one side to ground and larger 22pf on other side to ground.

Now smaller trimmer cap changes make huge frequency difference, lost easy setability feel.

Should this crystal be operated with nearly balanced capacity to ground on each side? Should I reduce the 22 pf COG on side without trimmer and increase cap in parallel with trimmer?

Any idea what happen to cause this situation?
Is crystal aging or defective?

Thanka for your thoughts.

--

Dave Shalita,
af389@lafn.org
Van Nuys, CA

Date: Wed, 17 Sep 1997 09:54:02 -0700 (PDT)
From: Randy Foltz <rfoltz@wsunix.wsu.edu>
To: NilsBull@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [26897] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <Pine.OSF.3.95.970917093054.22750B-100000@unicorn.it.wsu.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well, Nils, yes I think you might be missing a few of the finer points of "tree fishing." I'll briefly summarize my experiences over the last year or so. During this time I've put up over a dozen antennas into trees. Most of them successfully.

Fishing sinker: I use a 3/4 oz weight which isn't a very large one. I've tried 1 oz but it is just too heavy. Get the teardrop type not the ball shaped ones.

Line to shoot over the tree: My preference is 6 lb test monofilament. It is light weight and plenty strong enough. I've used 15 lb test, but the slight increase in weight per foot is enough to reduce the height you can shoot the sinker. I've caught a few sinkers in the tree and had to break the line. The 6 lb stuff is hard enough to break and the 15 lb test has to be cut.

Reel: I use an old Zebco 33 reel. It is attached to a short, ~ 1 foot long, dowell. The dowell goes in my pocket with the reel looking in the direction of flight. I've not had good luck with laying the reel on the ground because the line snags on just about anything on the ground as it follows the sinker.

Shoot the monofilament over the tree or a high branch. I can routinely get 75 to 80 feet high, after that the capacity of the reel becomes the

limiting factor. It won't hold the 200 feet or so line it takes to get that high and back down again.

Go find the sinker and TAKE IT OFF. (Taking the sinker off before pulling the line back over the tree is very important. Never try to pull a free swinging sinker through the tree. Nine times out of ten it will wrap around a branch and then it is time to get out the knife.) Tie onto the monofilament the line you will use to raise your antenna. I use nylon string that comes in 100 yard rolls. It has a breaking strength of around 300 lbs.

Reel in the monofilament line with the nylon line attached to it. Use the nylon line to raise one side of your antenna. Repeat this for the other side.

Well there are more fine points of tree fishing, such as tree choice and tree spacing and support separation, but I'll leave those things for another time.

72,
Randy
AB7TK ARCI QRP-L NORCAL NWQRP ARS
Moscow, ID

Date: Wed, 17 Sep 1997 11:32:11 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: NilsBull@aol.com
Cc: qrp-l@Lehigh.EDU
Subject: [26898] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <199709171732.LAA25282@bobcat.sni.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

>>Am I like doing something wrong here? Should I have
bought the pistol-grip cross-bow thingy with the magic,
<<

Well, I wouldn't go that far. I'm still waiting for the spud gun plans, but here's the official CQC slingshot technique. I don't think it's a secret, so I probably won't have to die for telling you.

It's called the pilot line technique and it's almost foolproof.

Clip (with a swivel) or tie your sinker onto actual fishing line on an actual spinning reel (if brand new, throw it out gently a few times and reel it back in to condition it). Shoot the line over the tree, or through the fork or whatever, and let it fall to the ground on the other side. With a loose knot, attach your "real line" to the fishing line on the near side of the tree. Go find the sinker, and pull the line till you can reach the "real line." Unite it and secure the real line. Go back to the other side of the tree and reel in the sinker (depending on the kind of tree and where the line has gone, you might want to remove the sinker before reeling the line back.

Did I say it works every time? Well, I lied. But it is pretty reliable. At Field Day we shot 8 trees and only one required a second attempt.

73

Marshall Emm

N1FN/VK5FN

n1fn@mtechnologies.com

<http://www.mtechnologies.com/mthome>

(303)752-3382

--

Date: Sun, 14 Sep 1997 20:59:06 +0200
From: "Juan A. Bertolin" <jbertolino@nexo.es>
To: "QRP - LIST ADDRESS" <qrp-l@Lehigh.EDU>
Subject: [26899] Building a Magnetic Loop for 20-80 meters
Message-ID: <199709171741.TAA03665@smtp.bankinter.es>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Dear QRP-wizards,

I am in the phase of designing and building a magnetic loop for 20-80 meters. I am using the ARRL ANTENNA HANDBOOK and all the equations of the chapter 5.

In the page 5-4 there is a reference to calculate the distributed capacitance. This capacitance is the correspondent to the interaction between the adjacent turns of the coil and it is interesting in order to know the maximum work frequency. Using the words of the book 'An exact mathematical analysis of its value is a complex problem. A simple

approximation is given by Medhurst as:

$$C = HD$$

where C = distributed capacitance in pF

H = constant related to the length-to-diameter ratio of the coil

D = diameter of the winding in cm.

close to the formula it shows up a table with the values of H for different Length-to-diameter ratios'

I tried to calculate the correspondent ratio for the antenna, for example the diameter of the conductor is 2,3 cm, the diameter of the turn is 80 cm. and the length (as there is only one turn) of the coil is 2,3 cm. If the loop is an octogonal loop ,then the ratio is

$$\text{Ratio} = \text{Diameter} / \text{Length coil} = 80 / (31 * 8) = 0,31831$$

and the Distributed Capacitance is, based in the table 2 where H = 0,60,

$$C = 1,37 \text{ pF.}$$

I think that this value is very low, in fact is the same for whatever relation between the diameter and the length, and I am thinking that may be there is an error in the book or, better say in my calculations but after to revise a lot of times I don't realize of my error.

Am I doing well the calculations?

Do anyone know more information about Medhurst's formula?

Thank you very much in advance.

Best Regards from EA,

73's for everybody

```
-----
      ?      \ /      ? ?
    ? ?  \ \ ~ ~ //  ?
      ?  (.\-0-0-/. ) ?  ?
-----o00o-( )-o00o-----
-----
-----
```

EA5XQ, QRA:Juan, QTH:Almazora, LOC:IM99TM

FT901DM, MFJ1796,V inv. 40,80m.

HOWES (80,40,20) in the future with a magnetic loop....

KDK 2mFM, MFJ1764

- SETEC ASTRONOMY -
- 'Only one key is enough to open all the doors' -

Date: Wed, 17 Sep 1997 11:06:35 -0700 (MST)
From: Bob Hightower <ki7mn@dancris.com>
To: mgemm@mtechnologies.com
Cc: qrp-1@Lehigh.EDU
Subject: [26900] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <199709171806.LAA06037@dancris.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 11:32 AM 9/17/97 -0600, you wrote:

>
>Did I say it works every time? Well, I lied. But it is pretty
>reliable. At Field Day we shot 8 trees and only one required
>a second attempt.
>
>
What, needed a coup d' grace?

73,
Bob KI7MN (ki7mn@dancris.com) Chandler, AZ
Grid DM43bi Lat 33.334500 Long -111.87260
NorCal #1221 ARCI #8918 Qrp-1 #271 CQC #274 AK QRP #30 ARRL
<http://www.dancris.com/~ki7mn>
WIMPS: QS0's=19 30=19 17=0 12=0 States=15/0/0 DX 0/0/0 QSL's=6

Date: Wed, 17 Sep 1997 14:09:59 -0400
From: "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
To: rfoltz@wsunix.wsu.edu
Cc: qrp-1@Lehigh.EDU
Subject: [26901] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <85256515.0061A6DF.00@dpcmail.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Randy hit lots of good points right on the head. I'll add a couple of

pointers from my experience
which might help:

Sinkers: I use 1/2 or 3/4 oz myself, either the teardrop (actually called a "bank sinker" in fishing lingo) or a egg sinker (round with hole). If you use the egg type, you need to make a gizmo on which to tie the fishing line - a wire thru the hole with double eyes is pretty easy. I like to use a fishing swivel on my line as a quick disconnect for the sinker.

Reel: 'Bout the same. Think mine is an old Shakespeare. Cheep one. Closed-face/spin-casting reels work the best. No need to buy an expensive one. What I did was to build up two adapter bars from 1/4-in aluminum rod - sorta shaped like a stretched-out Z. Two ends are fastened to my slingshot wrist brace with wooden clamps I fashioned. Other two ends come together and the reel is clamped to these with two small hose clamps. Result is that the reel sits out in front of the slingshot at about wrist level. Thus the sinker and string shoots out where you are pointing.

Randy is really right about taking the sinker off before reeling back in either a missed shot or the new pull line!! And if you use a fishing swivel to make a quick disconnect for the sinker, be sure to close it before winding the line back.

Also, I've found that sometimes it works better to "shoot in reverse", meaning get on the side of the tree such that you are shooting towards your antenna's position - lots of times it has less trees. Occassionally it helps with the particular way you might be arranging your ropes and saves some trouble if you are using your lightweight pull line to install a heavier rope for more permanent installations. Many times we naturally think of shooting towards the anchor trees and usually there are lots of other trees and brush behind it!

Practice shooting in a clear area for awhile too. Hope this helps someone.
Watson/WB4EXW

Date: Wed, 17 Sep 1997 9:47:00 -0500
From: Dan Tayloe-P26412 <Dan_Tayloe-P26412@email.mot.com>
To: ARDUJENSKI@aol.com, qrp-1@Lehigh.EDU
Message-ID: <M2079350.005.nw0x4.1.970917164836Z.CC-MAIL*/OU=SATCG/OU=AZBH/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

>If you measure the output of XMTR by connecting a diode from the
> positive node of your DUMMYLOAD resistor(s) and connecting a
> capacitor in parallel to the dummy load resistors (rectifying
> the voltage) how accurate is the power reading using the
> formula $(E \times E)/R$ where $R=50$ ohms??? 5%, 10% ??

Alan KB7MBI

Alan:

I have found that this method work fairly well for normal QRP levels, say, greater than half a watt. For very lower power, the diode voltage drops starts getting very significant.

For the rectifying cap, I use a 0.01uf. What I see out the diode/cap detector I use compares well with what I read off my 'scope. I would not consider it a precision measurement, but it is certainly very adequate.

I am sure even a 1000 pf would do. After all, unlike 60 Hz filtering, this cap is being topped off at a likely rate greater than 7,000,000 Hz. Since this cap needs to store energy for such a brief period of time (compared to 60 Hz), 0.01uf is the equivalent of:

$(7,000,000/60) \times 0.01 = 1160$ uf cap at 60 Hz (!!!).

The diode/cap combination will not bother your transmitter. The small cap charges rapidly (!!!) to the peak voltage and then draws almost no current.

The diode error I see is about 0.3v(?), much less than the typical 0.7v given for a silicon diode. I guess this is reasonable since very little current is being drawn. At the 1w level, 9.7v vs 10v gives .94w vs 1w, 5% error. At 5w, 22v vs 22.3v gives 4.89w vs 4.97w, about 1.7% error. All this is to say the error is not significant for

practical purposes, since your voltmeter is likely only good for 5% anyway!

A note on your formula: V^2/R is correct for a DC voltage. However, with the diode/cap combination, you are measuring something close to the *peak* voltage of an RF sine wave. The average voltage (RMS) of an RF sine wave is $V_{peak}/(\text{square root of } 2)$.

This means the formula you should be using with your diode detector is $V^2/(2 \cdot R)$ or $V^2/100$, not $V^2/50$, which is probably why you are asking the question. You were probably thinking you were see twice power you expected to see.

10 volts => 1w, 15v => 2.25w 20v => 4w 22.4v => 5w.

Good Luck!

- Dan Tayloe, N7VE, Phoenix, AZ, QRPL #696, Az ScQRPions
****Let the Fox Hunts Begin!!***

Date: Wed, 17 Sep 1997 10:21:06 -0700 (PDT)
From: David Feldman <dgif@netcom.com>
To: qrp-l@Lehigh.EDU
Subject: [26903] FAR circuits web page please
Message-ID: <199709171721.KAA14500@netcom22.netcom.com>

Sorry I misplaced it, but need their e-mail or web address so I can contact them.

Thanks,
73 Dave WB0GAZ dgf@netcom.com

Date: Wed, 17 Sep 1997 13:26:23 -0000
From: "Larry Cruise" <Larry.Cruise@MCI.Com>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [26904] FW: Building a Magnetic Loop for 20-80 meters
Message-ID: <01BCC36D.5083D580@lrcruise.ns.mci.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Hi Juan,

Check out the web site below. It is devoted to magnetic loops and has many resources including programs you can download. I am an AEA IsoLoop user and have been impressed with the performance of magnetic loops for their size..=20

<http://ourworld.compuserve.com/homepages/csl/magloop.htm>

-73 de AA5TA (Larry)

-----Original Message-----

From: Juan A. Bertolin [SMTP:jbertolino@nexo.es]

Sent: Sunday, September 14, 1997 6:59 PM

To: Low Power Amateur Radio Discussion

Subject: Building a Magnetic Loop for 20-80 meters

Dear QRP-wizards,

I am in the phase of designing and building a magnetic loop for 20-80 meters. I am using the ARRL ANTENNA HANDBOOK and all the equations of the chapter 5.

In the page 5-4 there is a reference to calculate the distributed capacitance. This capacitance is the correspondent to the interaction between the adjacent turns of the coil and it is interesting in order to know the maximum work frequency. Using the words of the book 'An exact mathematical analysis of its value is a complex problem. A simple approximation is given by Medhurst as:

$C = 3D HD$

where C =3D distributed capacitance in pF

H =3D constant related to the length-to-diameter ratio of the coil

D =3D diameter of the winding in cm.

close to the formula it shows up a table with the values of H for different Length-to-diameter ratios'

I tried to calculate the correspondent ratio for the antenna, for example

the diameter of the conductor is 2,3 cm, the diameter of the turn is 80 cm.

and the length (as there is only one turn) of the coil is 2,3 cm. If the

loop is an octogonal loop ,then the ratio is

Ratio =3D Diameter/Length coil =3D 80 / (31 * 8) =3D 0,31831

and the Distributed Capacitance is, based in the table 2 where H =3D =
0,60,

C =3D 1,37 pF.

I think that this value is very low, in fact is the same for whatever
relation between the diameter and the length, and I am thinking that may =
be

there is an error in the book or, better say in my calculations but =
after

to revise a lot of times I don't realize of my error.

Am I doing well the calculations?=20

Do anyone know more information about Medhurst's formula?

Thank you very much in advance.

Best Regards from EA,

73's for everybody

```
-----  
          ?      \ /      ? ?  
        ? ?  \\ ~ ~ //  ?  
          ?  (.\-0-0-/. ) ?  ?  
-----o00o-( )-o00o-----  
-----  
-----
```

EA5XQ, QRA:Juan, QTH:Almazora, LOC:IM99TM

FT901DM, MFJ1796,V inv. 40,80m.

HOWES (80,40,20) in the future with a magnetic loop....

KDK 2mFM, MFJ1764

```
-----  
- SETEC ASTRONOMY -  
- 'Only one key is enough to open all the doors'-  
-----
```

Date: Wed, 17 Sep 1997 14:28:40 -0400

From: Henry Freedenberg <henryf@quartz.gly.fsu.edu>

To: qrp-l@Lehigh.EDU

Subject: [26905] Keyboard Keyers

Message-ID: <34202158.4045@quartz.gly.fsu.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am thinking about trying to build a unit to send cw from a keyboard. Being real lazy, cw from a keyboard is easier to make than cw from a bug. I think MFJ sells a keyboard keyer. Anyone have any experience with it?

Anybody know of any kits/homebrew project writeups available? Anyone have an MFJ unit sitting in the attic?

Henry

Date: Wed, 17 Sep 1997 11:36:32 -0700
From: Elliott Lawrence <edl@pacbell.net>
To: qrp-l@Lehigh.EDU
Subject: [26906] Inductors
Message-ID: <34202330.6F1A@pacbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I still have about a dozen of the 88 mh inductors available. They are priced at \$1.25 each plus shipping. If anyone is still interested, please contact me directly.

72/73
Elliott WA6TLA

Date: Wed, 17 Sep 1997 12:51:27 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: Bob Hightower <ki7mn@dancris.com>
Cc: qrp-l@Lehigh.EDU
Subject: [26907] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <199709171852.MAA04645@bobcat.sni.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Hi, Bob--

>>What, needed a coup d' grace? <<

Precisely. That's why I want to build a spud gun, so I can knock the
&^%\$& tree DOWN if I need to. [g]

73

Marshall Emm

N1FN/VK5FN

n1fn@mtechnologies.com

<http://www.mtechnologies.com/mthome>

(303)752-3382

--

Date: Wed, 17 Sep 1997 11:59:15 -0700 (PDT)
From: Jim W7LS <w7ls@brigadoon.com>
To: qrp-1@Lehigh.EDU
Subject: [26908] Last call for silver contact material
Message-ID: <199709171859.LAA26442@k2.brigadoon.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ok, gang. This is the last call for requests for silver contacts for all you
folks that are building your own keys and keyer paddles. I'll listen for
requests here for 3 or 4 days and then fetch the contacts.

Here's the deal, again:

I can get some siver plated copper contacts that are really nice for
making keys and keyer paddles. They appear to be the same ones that
Vibroplex uses for their keys and paddles. About 1/8" diameter with a stud
out the back, about a steenth (1/16" for you non-machinist types :->) in
diameter and 1/8" long.

To get them, I'll need a SASE with a buck folded inside for a set of
4 contacts. Want more? Toss in a buck for each set of 4 you want. No
additional postage needed unless you're getting a fistfull or something.

Please alert me via e-mail ONLY if you haven't done so already. I
have a running list of folks and how many they want. Go ahead and send the
SASE now, but please, do alert me, so I don't have to do multiple runs to
fetch the contacts.

Here's my address:

Jim Hossack W7LS
15221 342nd Ave, NE

Duval, WA 98019

I'd like to see the keys people are making, if there is any way to do it. Maybe a contest? Oh NO! Not another building contest! Arrrgghhhh!....

Bye for now.... Jim W7LS

Date: Wed, 17 Sep 1997 15:10:16 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [26909] Clocks.... Again
Message-ID: <Pine.LNX.3.93.970917150407.1354A-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Recently one of my Credit Card companies offered me several "free" gifts, if I paid the postage. So, for about \$3 I got an LCD watch that does military time (23:14). I tried to find small clocks that would do 24 hour time, and about \$6 was the cheapest I could find. And none did the 24 hour format. So now, for contests, I wear it on my non-writin' arm and have one less thing to carry around. Look at some of that junk mail, it might just be worth something. Now if they'd just offer the "free" QRP antenna tuner...

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV QRP WAS 17/9 (w/c) | ccart@erols.com --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

Date: Wed, 17 Sep 1997 15:20:12 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [26910] Re: Last call for silver contact material
Message-ID: <Pine.LNX.3.93.970917151641.1354B-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 17 Sep 1997, Jim W7LS wrote:

> I can get some siver plated copper contacts that are really nice for

> making keys and keyer paddles. They appear to be the same ones that

Hmmm... WA6GER didn't order a bunch of these, did he? Cmon' PacifiCon :)

```
-- Chris Cartwright,   Technical Engineer   |       ccart@vidtel.com       --  
-- N3XRV               QRP WAS 17/9 (w/c)   |       ccart@erols.com       --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #????? | http://dns.vidtel.com/~ccart --  
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --
```

Date: Wed, 17 Sep 1997 11:23:00 -0500
From: Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>
To: qrp-l@Lehigh.EDU (Receipt Notification Requested)
Subject: [26911] New NorCal Kit
Message-ID: <M2043972.013.o3f3g.1.970917192822Z.CC-MAIL*/OU=LMPCC4/OU=ILBB/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Jerry:

I think the first generation of the new kit will have to be analog.
We haven't figured out how to accelerate a spud to digital velocities yet.

Just remember, hand-selected spuds are a good investment.

You didn't hear this from me.

73, Bob N6WG

Date: Wed, 17 Sep 1997 12:38:14 -0700 (MST)
From: "Mark E. Monninger" <markem@primenet.com>
To: qrp-l@Lehigh.EDU
Subject: [26912] Spud guns
Message-ID: <Pine.BSI.3.96.970917123556.23519B-100000@usr05.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OK, so it's not directly QRP related, but can someone send, post, or point
me to some plans for one of these monsters?

73... Mark AA7TA markem@primenet.com

Date: Wed, 17 Sep 1997 13:06:46 -0700
From: Jeff Grudin <grudin@pacific.vdbs.com>
To: qrp-1@Lehigh.EDU
Subject: [26913] Re: New Norcal Kit
Message-ID: <34203856.5069@vdbs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> > Thirdly, some of the metal work involved has not yet been manufactured.
>
> Aha. A clue.

Maybe it's a 9 band log periodic that folds up and fits in a backpack,
weighs in at less than a pound, and auto launches into a tree with the
famous spud gun.

They are still working on the solar powered rotator for the next
project.

--
73 de Jeff AC6KW
grudin@vdbs.com

QRP-L #16	Private Practice : Companion Animals and
Exotics	
Norcal QRP #1292	Ocean Animal Clinic / Cat Clinic of Santa
Cruz	
	Santa Cruz,
California	

QRP'ers do it with less energy (but lot's of enthusiasm)!

Date: Wed, 17 Sep 1997 13:15:21 -0700 (PDT)
From: doug hauff <slmachco@fix.net>
To: qrp-1@Lehigh.EDU
Subject: [26914] Rainbow Tuner Enclosure
Message-ID: <199709172015.NAA13117@fletch.fix.net>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

One more thing I forgot to mention: it will be probably two months before I could produce the Rainbow Tuner Custom Enclosure....among other things, TOP SECRET project in progress...

73 Doug KE6RIE -Just trashing your TV(vast wasteland) is a good start-

Date: Wed, 17 Sep 1997 12:02:07 -0700
From: torell@sicom.com (Kent Torell)
To: af389@lafn.org
Cc: qrp-1@Lehigh.EDU
Subject: [26915] Re: Constant amplitude circuit
Message-ID: <v02130502b045d63fae21@[192.91.202.41]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>I believe the AD9850 output amplitude is not constant with frequency
>and drops fast as the frequency out approaches 1/2 clock frequency (125
>mhz).

The 9850 output dac functions as a "zero-order hold", which means it holds a voltage until updated. This makes the stairstep looking signal you see if it is unfiltered. The frequency response of a zero-order hold is

$20 \log_{10} (\sin(x)/x)$ where x is $\pi \cdot F_{out} / F_{sample\ rate}$, and sin works with radian arguments.

Fout	dB
0	0
.15	-0.3
.25	-0.9
.35	-1.8
.45	-3.1
.55	-4.9
.65	-7.2

You can't easily operate beyond 0.35 of the sample rate...filter requirements get pretty tough. The alias signal you have to filter when tuned to .35 appears at .65, and is 5.4 dB below the desired signal (which is -1.8 db below full strength).

Kent Torell torell@sicom.com 602-607-4852

SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260
AB70A scQRPion 6,qrp-1 57,ARCI 9075 DM33xn 33.55 N 112.078 W

Date: Wed, 17 Sep 1997 12:58:52 -0700
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: <Bob_Tellefsen-CNSE97@email.mot.com>, "Low Power Amateur Radio Discussion"
<qrp-1@Lehigh.EDU>
Subject: [26916] Re: New NorCal Kit
Message-ID: <199709171957.0AA22491@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Bob --

The NorCal kit will be followed by the K1MG Digital Spud Clocker.

Mike K1MG

>
> I think the first generation of the new kit will have to be analog.
> We haven't figured out how to accelerate a spud to digital velocities
yet.

Date: Wed, 17 Sep 1997 12:14:33 -0600
From: AE0Q V31RY <v31ry@ix.netcom.com>
To: qrp-1@Lehigh.EDU
Subject: [26917] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <2.2.16.19970917181433.095f85e2@popd.ix.netcom.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Marshall N1FN wrote:
>It's called the pilot line technique and it's almost foolproof.
>Clip (with a swivel) or tie your sinker onto actual fishing line on
>an actual spinning reel (if brand new, throw it out gently a few
>times and reel it back in to condition it). Shoot the line over the
>tree, or through the fork or whatever, and let it fall to the ground
>on the other side. With a loose knot, attach your "real line" to the

>fishing line on the near side of the tree. Go find the sinker, and
>pull the line till you can reach the "real line." Unite it and
>secure the real line. Go back to the other side of the tree and reel
>in the sinker (depending on the kind of tree and where the line has
>gone, you might want to remove the sinker before reeling the line
>back.

There is a picture of a Zebco 404 spinning-reel mounted to the bottom of a Wrist Rocket slingshot on my web site. I replaced the long bolt holding the Wrist-rocket together with a longer one from the local hardware store. I filled the handle of a broken fishing rod with epoxy so it wouldn't be crushed, and then drilled a hole through the handle so it would slip on the bolt sticking out of the bottom of the slingshot. A wingnut holds it on, with the reel pointing out in front.

I use the same technique as Marshall, either a 1 or 2 ounce sinker on 15 pound line. It usually goes TOO far, over more trees than I need!

The picture is here:

<http://www.qsl.net/ae0q/camping.htm>

73/ZUT -- Glenn

"Remember, any tool can be the right tool!" Red Green

AE0Q / V31RY ex: GM5BKC, ZB2WZ, SV0WY, WA0VPK
v31ry@ix.netcom.com --SOWP 5558-M, ARRL LM, QCWA LM, NCVA--
<http://www.qsl.net/ae0q>

Date: Wed, 17 Sep 1997 15:29:06 -0600
From: John Evans - N0HJ <jaevans@codenet.net>
To: qrp-l@Lehigh.EDU
Subject: [26918] Re: New NorCal Kit
Message-ID: <34204BA2.70BD6F1D@codenet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> > I think the first generation of the new kit will have to be analog.
> > We haven't figured out how to accelerate a spud to digital velocities
> yet.

Silly Ham - just throwing the spud with your "hands" creates a "digital" velocity !!!! Although, getting your hands in the way of the path of a

gun projectile can also produce digital velocities !!!!

John A. Evans	Chief Systems Administrator
Office: (719) 528-1800 x164	Titan Software Systems
Fax: (719) 528-1888	1115 Elkton Drive, Suite 200
email: jaevans@cos.cst.titan.com	Colorado Springs, CO 80907-3535

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045
CQrp #15 NJ-QRP #50 AK-QRP #52 NW-QRP #454 FISTS #3184
Personal Web Page: <http://www.geocities.com/capecanaveral/9773/>

Date: Wed, 17 Sep 1997 15:50:46 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: AE0Q V31RY <v31ry@ix.netcom.com>
Cc: qrp-l@Lehigh.EDU
Subject: [26919] Re: Spud guns, nuke-you-lur silos & a slingshot
Message-ID: <199709172151.PAA26096@bobcat.sni.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

```
>> A wingnut holds it on, with the reel
pointing out in front.
<<
```

Glenn's an ex-Navy puke so I know he had to learn all that lines and knots and stuff the hard way.

See? When I did water survival in the AF our instructor was one of them Navy pukes and he taught us when you throw a line to a swimmer you throw it past him and drag it back.

Breeding will tell. Every time.

73

Marshall Emm

N1FN/VK5FN

n1fn@mtechnologies.com

<http://www.mtechnologies.com/mthome>

(303)752-3382

--

Date: Wed, 17 Sep 97 21:55:34

From: "KA5T Larry Wise" <lewise@inetport.com>

To: "qrp" <qrp-1@Lehigh.EDU>

Subject: [26920] Re: Spud guns, nuke-you-lur silos & a slingshot

Message-ID: <199709172149.QAA04259@admin.inetport.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Content-Transfer-Encoding: 7bit

Well Nils;

I can tell you one thing... That advise about taking the
sinker off is good advise...I always do it....Well except
this one time... (How could we have a tale if there
were no one time exception????)

Anyway we were out in a state park near San Angelo, on
our way home from the big Ft Tuthill at Flagstaff fest, having driven
an extra ten miles looking for the park entrance when we
were only a mile from it...and it was beginning to get late and
I wanted to get my 80 meter antenna up to meet a MARS net....

Here we are in a beautiful cool pecan grove with BIG TALL trees with
big beautiful limbs waaaay up there....Just begging for a
line to hold up an antenna....

Gotta oblige....Gotta oblige....

So after chocking the trailer and connecting the electricity and
leveling it all up and putting down the stabilizer widgets, I haul
out the trusty green antenna toolbox (one of those 4.95 Kmart
specials...) and get out the slingshot....

When I went down to Walmart to buy this thing sometime in the dim dark past, they didn't have the simple wooden one so I wound up with one of those fold up thingies that takes lawn chair experience to get unfolded and on the arm right side up....

Now I had started out one time to use the Zebco 202 that I knew that I had, but after a search of the places where it should be I adopted plan B....use the 20 lb test line that I found in the garage and the spool that it came on...(I was in a hurry that time too...) This spool is one of those about an inch or so wide and doesn't have a wide rim on it....The line lays up close to the edge...in fact almost falls off....

So back to the San Angelo story...

After having stepped off the distances to the proposed end supports, and selecting the perfect spot from which to launch the one ounce little lead projectile,,,,,Commence drill one:

Slingshot on the arm...Right side up best....

Sinker in the pocket....

Spool on the ground....

No near by trash or bushes to foul the line...(Not always a precise or successful step)

Take careful aim...(Some times John Barleycorn assists here...)

Let'er rip.....

Ziiiiinnnnng, up over the target branch

and another branch....

and another branch...

and into the next tree....

D\$#@%&* that little lead projectile....Commence drill two:

Let it down to the ground...

Cut it off...

Reel the line in... (Here's where we reeeeaallly need the Zebco)

Re-attach the little lead projectile...

Do the 'get it right side up on the arm' drill...

Do the rest of drill one...

Ziiiiiiiiinnnnng.....

Same song.... different verse....

After a few stanzas of this song (I've done this lots of times, but

obviously not too good at it yet...)
I made the fatal decision....

We're just gonna' whip that baby back here and eliminate
step one and two of drill two and speed up the process.....
Weeeellllll, you can't really whip it back in cause it'll wind up
on some limb and really cause ulcers....

Gently.....Gently...Pull.. pull....Ahhh almost over that last limb...

Tug....Tug...

It's stopped.....D*@\$%mit....

PULL....PULL....PULL..... TIGHTER.....YANK!!!!

ZIIIIINNNNGGG....WHAP....

Right in the right forefinger next to the big knuckle...

000000HHHHH.....That smarts....SMARTS>>> SMARTS!!!

Next big decision....Is it broken????.....

Well it still seemed to bend all the right ways....But boy...
is it gettin' BIG....

So Nils....Let me implore you, when Randy says TAKE IT OFF,...

TAKE IT OFF!!!

Thats good advise....

Larry,

/* PS

Yes, I got the antenna up in time for the net...With help...
(What that girl puts up with...)

Ever try to put up an antenna with your primary mitt in
a makeshift ice bag???? Had to shoot that lawn chair
contraption one more time too....(Decided wherever it went
it was good enough!!)

And almost as bad was taking the antenna down and getting
the trailer ready to go the next morning....

In fact, that knuckle and the rest of the mitt took a few days to get back to something near normal...

Got to thinkin' later....HMMMMM...what if that had been the ole cabeza???
One of the lookers????

Boy was I lucky.....
*/

Larry KA5T lewise@inetport.com Georgetown, Texas

Larry KA5T lewise@inetport.com Georgetown, Texas

Date: Wed, 17 Sep 1997 15:07:09 -0700
From: Vic Rosenthal <rakefet@rakefet.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [26921] Super CMOS info
Message-ID: <3420548C.E7A4ED00@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks to everyone who replied to my message asking for info on the Super CMOS keyer. Wow, did I get a lot of messages!

Vic K2VCO

Date: Wed, 17 Sep 1997 18:05:00 -0600
From: "Basil (Darin) Arrick" <basila@OnRamp.NET>
To: qrp-l@Lehigh.EDU
Subject: [26922] 6 meter CW or SSB/CW QRP Plans wanted
Message-ID: <199709172257.RAA16850@mailhost.onramp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Does anyone have any schematics for 6 meter CW or SSB/CW QRP rigs? I would love to buy a kit, as I'm not a very experienced kit builder, but I could work from just a schematic.

Second question: Am I NUTS for wanting to run QRP on 6 meters? I got the impression that when 6 is open, 5 watts will go a long way.

Thanks!

+-----+-----+-----+-----+		
Basil (Darin) Arrick	P.O. Box 820054, North Richland Hills, TX, 76182	
+-----+-----+-----+-----+		
basil@orthodox.net	Orthodox Christian	http://www.orthodox.net
basil@homestead.org	Homesteader/Farmer	http://www.homestead.org
ICQ # 3352463	ICQ User	http://www.mirabilis.com
	Microsoft NetMeeting	ils.family.four11.com
KB5KHR	Amateur (Ham) Radio	
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